

**CLAIMS**

1. A method for testing software in a production environment handling live traffic between clients and at least one production server, comprising:

5 connecting a system under test into the production environment;

replicating live traffic between clients and at least one production server onto the system under test while isolating the system under test from the production environment;

comparing a response from the production server with a corresponding response from the system under test to evaluate the system under test; and

10 terminating the response from the system under test before the response reaches the production environment.

2. The method as described in Claim 1 wherein the production environment is a content delivery network (CDN) and the system under test is a CDN content server.

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3. The method as described in Claim 2 wherein the CDN comprises a set of production servers and the system under test comprises a corresponding set of content servers.

4. The method as described in Claim 1 further including the step of logging given data replicated from the live traffic.

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5. The method as described in Claim 1 wherein the production environment includes a switch, and the step of replicating pulls the live traffic by port scanning the switch.

6. The method as described in Claim 1 wherein the step of comparing determines whether the system under test has given minimum functionality.

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7. The method as described in Claim 1 wherein the step of comparing determines whether the response from the production server and the corresponding response from the system under test are identical.

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9. A method for field-testing operative in a content delivery network (CDN) handling live traffic between clients and a set of production servers organized into a region, wherein the region includes a switch and a set of content servers under test, the method comprising:

- 5 replicating live traffic between clients and the production servers onto the set of content servers under test;
- comparing a response from a given production server with a corresponding response from a given content server under test;
- selectively logging data from the comparison; and
- 10 terminating the response from the content server system under test before the response reaches a requesting client.

10. The method as described in Claim 9 wherein the step of comparing determines whether the content server under test has given minimum functionality.

11. The method as described in Claim 9 wherein the step of comparing determines whether the response from the given production server and the corresponding response from the given content server are identical.

12. The method as described in Claim 9 wherein the step of comparing determines whether the response from the given production server and the corresponding response from the given content server under test are equivalent.

13. A method for field-testing operative in a request-response production environment handling live TCP-based traffic between clients and a production server, comprising:

integrating a system under test (SUT) into the production environment;

using the live TCP-based traffic to generate load on the system under test (SUT); and

as a given test is carried out, terminating SUT responses intended for the clients.

14. The method as described in Claim 13 wherein the request-responses production environment is a content delivery network (CDN) and the production server is a CDN caching appliance.

15. The method as described in Claim 13 wherein the request-response production environment is a web hosting environment and the production server is a web server.

16. The method as described in Claim 13 wherein the given test compares an HTTP response from the production server and the system under test (SUT).

17. The method as described in Claim 13 further including the step of logging TCP packets from the live TCP-based traffic as the given test is carried out.